

CLAIMS

I claim:

1. A golf ball of unitary molded construction, wherein the golf ball is foamed from a composition that comprises an ethylene-vinyl acetate copolymer, a thermoplastic elastomer, and a blowing agent, and wherein the golf ball has (i) a diameter that ranges from about 1.6 to about 1.75 inches, (ii) a weight that ranges from about 10 to about 15 grams, and (iii) a coefficient of restitution value that ranges from about 0.33 to about 0.42.
2. The golf ball of claim 1 wherein the ethylene-vinyl acetate copolymer ranges from about 60 to about 90 weight percent of the composition.
3. The golf ball of claim 1 wherein the thermoplastic elastomer ranges from about 5 to about 25 weight percent of the composition.
4. The golf ball of claim 1 wherein the blowing agent ranges from about 5 to about 10 weight percent of the composition.
5. The golf ball of claim 1 wherein the ethylene-vinyl acetate copolymer has vinyl acetate content that by weight ranges from about 15% to about 18%.
6. The golf ball of claim 1 wherein the thermoplastic elastomer has a Shore Hardness ranging from about 45 to about 70.
7. The golf ball of claim 1 wherein the thermoplastic elastomer is one or more of (i) a thermoplastic elastomer based on a dynamically vulcanized elastomer-thermoplastic blend, (ii) a styrene tri-block copolymer thermoplastic elastomer, and (iii) an ethylene- α -olefin copolymer thermoplastic elastomer.

8. The golf ball of claim 1 wherein the thermoplastic elastomer is a styrene tri-block copolymer thermoplastic elastomer.

9. The golf ball of claim 8 wherein the styrene tri-block copolymer thermoplastic elastomer is a styrene-butadiene-styrene block copolymer, a styrene-ethylene/butylene-styrene block copolymer, or a combination thereof.

10. The golf ball of claim 8 wherein the styrene tri-block copolymer thermoplastic elastomer is a styrene-ethylene/butylene-styrene block copolymer.

11. A golf ball of unitary molded construction, wherein the golf ball is foamed from a composition comprising:

a major amount by weight of an ethylene-vinyl acetate copolymer;

a minor amount by weight of a thermoplastic elastomer material, wherein the thermoplastic elastomer material is one or more of (i) a thermoplastic elastomer based on a dynamically vulcanized elastomer-thermoplastic blend, (ii) a styrene tri-block copolymer thermoplastic elastomer, and (iii) an ethylene- α -olefin copolymer thermoplastic elastomer; and

a blowing agent.

12. The golf ball of claim 11 wherein the ethylene-vinyl acetate copolymer ranges from about 60 to about 90 weight percent of the composition.

13. The golf ball of claim 11 wherein the thermoplastic elastomer ranges from about 5 to about 25 weight percent of the composition.

14. The golf ball of claim 11 wherein the blowing agent ranges from about 5 to about 10 weight percent of the composition.

15. The golf ball of claim 11 wherein the ethylene-vinyl acetate copolymer has vinyl acetate content that by weight ranges from about 15% to about 18%.

16. The golf ball of claim 11 wherein the thermoplastic elastomer has a Shore Hardness ranging from about 45 to about 70.

17. The golf ball of claim 11 wherein the thermoplastic elastomer is one or more of (i) a thermoplastic elastomer based on a dynamically vulcanized elastomer-thermoplastic blend, (ii) a styrene tri-block copolymer thermoplastic elastomer, and (iii) an ethylene- α -olefin copolymer thermoplastic elastomer.

18. The golf ball of claim 11 wherein the thermoplastic elastomer is a styrene tri-block copolymer thermoplastic elastomer.

19. The golf ball of claim 18 wherein the styrene tri-block copolymer thermoplastic elastomer is a styrene-butadiene-styrene block copolymer, a styrene-ethylene/butylene-styrene block copolymer, or a combination thereof.

20. The golf ball of claim 18 wherein the styrene tri-block copolymer thermoplastic elastomer is a styrene-ethylene/butylene-styrene block copolymer.